


<i>Application Number</i> 	Application/Control No. 10/737,388	Applicant(s)/Patent Under Reexamination MIN ET AL.
	Examiner Charles E. Anya	Art Unit 2194



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,388	12/16/2003	Hong Min	POU920030170US1	5371

46369 7590 10/18/2007
HESLIN ROTHENBERG FARLEY & MESITI P.C.
5 COLUMBIA CIRCLE
ALBANY, NY 12203

EXAMINER

ANYA, CHARLES E

ART UNIT	PAPER NUMBER
----------	--------------

2194

MAIL DATE	DELIVERY MODE
-----------	---------------

10/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/737,388

Applicant(s)

MIN ET AL.

Examiner

Charles E. Anya

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3/MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. Claims 1-20 are pending in this application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-4,9-13,18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. 6,487,607 B1 to Wollrath et al.**

3. As to claim 1, Wollrath teaches a method of transferring executable program code between computer processes, the method comprising: providing an object which comprises a hashtable, the hashtable having at least one set of elements, one element of the at least one set of elements comprising executable program code (Steps 702/703 Col. 10 Ln. 41 – 50); wherein the program code comprises logic which employs as data input the hashtable (“...object array...” Col. 10 Ln. 45 – 61) and transferring the object from a sender computer process to a receiver computer process (Step 703 “...transmits...” Col. 10 Ln. 48 – 50), retrieving the executable program code from the

Art Unit: 2194

hashtable (Steps 704-706 Col. 10 Ln. 612 - 67) and invoking the executable program code with the at least one other element of the hashtable as data input thereto (Steps 707-710 Col. 11 Ln. 8 – 14).

4. As to claim 2, Wollrath teaches the method of claim 1, wherein the at least one set of elements comprises multiple tuples, each tuple comprising a first element and a second element (“...object id, method hash...” Col. 10 Ln. 48 – 61), and wherein the second element of at least one tuple comprises the program code (method hash...” Col. 10 Ln. 48 – 61), and the second element of at least one other tuple comprises data relevant to the program code (“...method hash...” Col. 10 Ln. 48 – 61).

5. As to claim 3, Wollrath teaches the method of claim 1, wherein the providing comprises providing the object as a serialized data object and transporting the serialized data object from the sender computer process to the receiver computer process (“...marshals parameter...” Col 10 Ln. 48 – 67), and wherein the method further comprises deserializing the serialized data object at the receiver computer process to obtain the hashtable, scanning the hashtable for executable program code (Steps 704-706 Col. 10 Ln. 62 – 67), and invoking the program code with at least other of the hashtable as data input thereto (Step 707 Col. 11 Ln. 8 – 14).

6. As to claim 4, Wollrath teaches the method of claim 3, further comprising adding data to the hashtable at the receiver computer process, the data being relevant to the

Art Unit: 2194

executable program code and being added prior to invoking of the executable program code using as data input only the hashtable (Step 706 Col. 10 Ln. 64 – 67, Col. 11 Ln. 1 – 7).

7. As to claim 9, Wollrath teaches the method of claim 1, wherein the providing comprises, at the sender computer process, creating an empty hashtable, integrating executable program code into the hashtable (Col. 10 Ln. 45 – 50), and serializing the hashtable into a serialized data object for transport to the receiver computer process (“...marshals parameter...” Col. 10 Ln. 48 – 50).

8. As to claims 10-13, see the rejection of claims 1-4 respectively.

9. As to claims 18 and 19, see the rejection of claims 9 and 1 respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1,10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 6,292,933 B1 to Bahrs et al. in view of U.S. Pat. No. 6,629,154 B1 to Jones et al.

11. As to claim 1, Bahrs teaches a method of transferring executable program code between computer processes, the method comprising: providing an object which comprises a hashtable, the hashtable having at least one set of elements, one element of the at least one set of elements comprising executable program code ("...code..." Col. 4 Ln. 53 – 63, "...a table..." Col. 60 Ln. 34 – 35, Col. 66 Ln. 38 – 43); wherein the program code comprises logic which employs as data input the hashtable ("...hashed and the hash code is stored..." Col. 60 Ln. 16 – 24) and transferring the object from a sender computer process to a receiver computer process ("...serialized data is transmitted..." Col. 4 Ln. 61 – 63, "...receiving the modified data element..." Col. 66 Ln. 45, Col. 66 Ln. 56 – 59) and retrieving the executable program code from the hashtable ("...replacing the hash code..." Col. 66 Ln. 47).

Bahrs is silent with reference to invoking the executable program code with the at least one other element of the hashtable as data input thereto.

Jones teaches invoking the executable program code with the at least one other element of the hashtable as data input thereto (Step 506 Col. 10 Ln. 19 – 26).

It would have been obvious to one of ordinary skill the art the time the invention was made to modify the system of Bahrs with the teaching of Jones because the teaching of Jones would improve the system of Bahrs by identifying unique methods for

Art Unit: 2194

invocation and thus avoiding false identification of incorrect remote methods (Jones Col. 4 Ln. 56 – 60).

12. As to claims 10 and 19, see the rejection of claim 1 above.

13. Claims 5-8,14-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 6,487,607 B1 to Wollrath et al. in view of U.S. Pat. No. 6,721,740 B1 to Skinner et al.

14. As to claim 5, Wollrath is silent with reference to the method of claim 1, wherein the providing comprises providing multiple serialized objects, each serialized object having a different hashtable therein, and transporting a first serialized object from a first sender computer process to a receiver computer process and transporting a second serialized object from a second sender computer process to the receiver computer process, and deserializing the first serialized object and the second serialized object at the receiver computer process to obtain a first hashtable and a second hashtable.

Skinner teaches the method of claim 1, wherein the providing comprises providing multiple serialized objects, each serialized object having a different hashtable therein, (Clients 300A/300B "...serialized..." Col. 16 Ln. 21 – 33) and transporting a first serialized object from a first sender computer process to a receiver computer process and transporting a second serialized object from a second sender computer process to the receiver computer process (Clients 300A/300B "...by one application..." Col. 16 Ln.

Art Unit: 2194

21 – 51), and deserializing the first serialized object and the second serialized object at the receiver computer process to obtain a first hashtable and a second hashtable (Server-Side Communication Management Components 305A/305B Col. 16 Ln. 46 – 51).

It would have been obvious to one of ordinary skill the art the time the invention was made to modify the system of Wollrath with the teaching of Skinner because the teaching of Skinner would improve the system of Wollrath by providing a process for inter-process communication whereby data is exchanged between programs using a shared memory and running at the same time.

15. As to claim 6, Skinner teaches the method of claim 5, wherein the first sender computer process, the second sender computer process, and the receiver computer process are on different computing units (figure 3).

16. As to claim 7, Skinner teaches the method of claim 5, further comprising merging the first hashtable received from the first sender computer process and the second hashtable received from the second sender computer process at the receiver computer process into a common hashtable (“...shared portion of memory...” Col. 16 Ln. 34 – 51), and iterating through the common hashtable for executable program code to be invoked using the common hashtable as the only data input thereto (“...read out...” Col. 16 Ln. 34 – 51).

Art Unit: 2194

17. As to claim 8, Skinner teaches the method of claim 7, further comprising adding data to the common hashtable at the receiver computer process, the data being relevant to executable program code in the common hashtable (“...written to...” Col. 16 Ln. 43 – 51) and being added prior to invoking the executable program code using as data input only the common hashtable (“...read out...” Col. 16 Ln. 34 – 51).

18. As to claims 14-17, see the rejection of claims 5-8 respectively.

19. As to claim 20, see the rejection of claim 8 above.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is 571-272-3757. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cea.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER